

REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

Claims 1-18 remain pending. Claims 1, 5, 7, 11, 13, and 17 are independent.

OBJECTION TO THE ABSTRACT

The Abstract is objected to for minor informalities. *See Office Action, page 2, specification section.* A replacement Abstract is submitted herewith to address the issues raised by the Examiner. Applicant respectfully requests that the objection to the Abstract be withdrawn.

OBJECTION TO THE TITLE

The title is objected to for allegedly being non-descriptive. *See Office Action, page 2, the specification section.* The title has been amended as suggested to address this objection. Applicant respectfully requests that the objection to the title be withdrawn.

§ 102 REJECTION – NISHIGAKI

Claims 1, 7 and 13 stand rejected under 35 USC 102(e) as allegedly being anticipated by Nishigaki et al. (USP 6,590,678). *See Office Action, items 1-4.* Applicant respectfully traverses.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. 2131; M.P.E.P. 706.02.* Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, Nishigaki fails to teach or suggest each and every claimed element. For example, independent claim 1 recites, in part, “generating a three-dimensional look-up table for carrying out the tone conversion processing and the color correction processing on the image data.” *Emphasis added.* Independent claim 7 and 13 also recite similar features. As will be demonstrated below, Nishigaki fails to teach or suggest at least this feature.

In the Office Action, the Examiner alleges that Nishigaki teaches generating both the three-dimensional look-up table for carrying out tone conversion processing 2005 and color correction processing 2007 on the image data. Contrary to the Examiner’s assertion, Nishigaki cannot be relied upon to teach or suggest the feature of generating the look-up table for carrying out the tone conversion processing. As shown in Figure 2 of Nishigaki, the tone conversion portion 2005 is part of the image processing circuit 106. Nishigaki

discloses that the tone conversion portion 2005 performs tone conversion to convert reflection data OR1, OG1, and OB1 into tone data DR, DG, and DB using conversion functions F4R, F4G, and F4B. *See column 7, lines 3-12.* The conversion functions utilized are log functions. Thus, it is clear that the tone conversion processing is carried out by application of a direct function. Nishigaki is entirely silent regarding any relationship between a look-up table and the tone conversion processing whatsoever.

Thus, it is clear that Nishigaki fails to teach or suggest the feature of generating the three-dimensional look-up table for carrying out the tone conversion processing as recited in the independent claims. Therefore, independent claims 1, 7, and 13 are distinguishable over Nishigaki.

Applicant respectfully requests that the rejection of claims 1, 7, and 13 based on Nishigaki be withdrawn.

§ 103 REJECTION – NISHIGAKI, KIMURA

Claims 3, 9, and 15 stand rejected under 35 USC 103(a) as allegedly being unpatentable over Nishigaki in view of Kimura (USP 5,974,173). *See Office Action, items 5-8.* Applicant respectfully traverses.

It is noted that claims 3, 9 and 15 depend from independent claims 1, 7 and 13 respectively. It has been shown above that the independent claims are distinguishable over Nishigaki. Kimura has not been, and indeed cannot be,

relied upon to correct for at least the above noted deficiencies of Nishigaki. Therefore, independent claims 1, 7 and 13 are distinguishable over the combination of Nishigaki and Kimura.

For at least due to the dependency thereon, claims 3, 9, and 15 are also distinguishable over the combination of Nishigaki and Kimura. Applicant respectfully requests that the rejection of claims 3, 9, and 15 based on Nishigaki and Kimura be withdrawn.

§ 103 REJECTION – NISHIGAKI, OKU

Claims 2, 4, 5, 8, 10, 11, 14, 16 and 17 stand rejected under 35 USC 103(a) as allegedly being unpatentable over Nishigaki in view of Oku et al. (USP 5,489,996). *See Office Action, items 9-18.* Applicant respectfully traverses.

Regarding claims 2, 4, 8, 10, 14 and 16, it is noted that these claims depend from independent claims 1, 7, and 13 directly or indirectly. It has been shown above that the independent claims are distinguishable over Nishigaki. Oku has not been, and indeed cannot be relied upon to correct for at least the above-noted deficiencies of Nishigaki. Therefore, independent claims 1, 7 and 13 are distinguishable over the combination of Nishigaki and Oku.

For at least due to the dependency thereon, dependent claims 2, 4, 8, 10, 14 and 16 are also distinguishable over the combination of Nishigaki and Oku.

It should be noted that these dependent claims are distinguishable on their own merit. For example, Oku only discloses carrying out color correction processing considering properties of an image recording medium or an image recording apparatus. Thus, contrary to the Examiner's assertion, Oku cannot be relied upon to teach or suggest the feature of generating the three-dimensional look up table for a model of the digital camera as recited in claims 2, 8 and 14.

As another example, claim 4 recites in part, "comparing a number of pixels in an image represented by the image data with the number of lattice points in the three dimensional look up table." Claims 10 and 16 recite similar features. The Examiner alleges Nishigaki teaches such a feature.

However, contrary to the Examiner's assertion, Nishigaki discloses that the lattice point determiner 501 uses previously stored M input signals, wherein M is an integer and larger than N+1, which represents the number of the input signals previously stored. *See Nishigaki, column 8, lines 12-15.* In other words, as disclosed in Nishigaki, it is already known that the number of pixels of the image represented by the image signal is larger than the number of lattice points. Thus, it is not necessary to compare the number of pixels in the image represented by the image data with the number of lattice points in the three dimensional look up table as disclosed in Nishigaki. Indeed, Nishigaki is silent regarding any type of comparison made. Therefore, Nishigaki cannot

be relied upon to teach or suggest the above-recited feature as the Examiner contends.

It is then completely logical that Nishigaki cannot be relied upon to teach or suggest the feature of “obtaining the processed image data being a step of obtaining the processed image data by converting the image data according to the three dimensional look up table in the case where the number of pixels is larger than the number of lattice points, and by carrying out the tone conversion processing and the color correction processing on each of the pixels in the image represented by the image data in the case where the number of pixels is equal to or smaller than the number of lattice points,” also as recited in claim 4.

Similarly, Oku cannot be relied upon to teach or suggest the above-recited features. In the Office Action, the Examiner states “Oku et al. teaches on column 2, lines 6-15 that it was well known to use three dimensional look up tables where the input color signals and the output color signals are each expressed with eight bits, if a large memory size is practical to use. Therefore, the number of input signals is equal to the number of lattice points.” *See Office Action, page 6, first full paragraph.*

This is a mischaracterization of Oku’s disclosure. Oku actually states “where the input image color signal and the output image color signal are each expressed by eight bits, a table memory of approximately 50M bytes ... is

required. Use of such a large memory is uneconomical.” Emphasis added; See *Oku, column 2, lines 9-12*. Contrary to the Examiner’s characterization, Oku specifically indicates that expression of the color signals with eight bits is impractical.

Further, Oku states “additionally, for the color adjustment, the table of 50M bytes must be rewritten, leading to poor efficiency of the color adjusting work.” Emphasis added; see *column 2, lines 13-15*. Clearly, Oku specifically teaches away from the Examiner’s characterization.

Regarding independent claims 5, 11, and 17, it is noted that these claims recite the feature of the three-dimensional look up table being used to carry out both the color correction processing and the tone conversion processing. It has been shown above that neither Nishigaki nor Oku can be relied upon to teach or suggest at least this feature. It is also noted that these independent claims recite the feature of comparing the number of pixels in the image represented by the image data with the number of lattice points in the three dimensional look up table. Again, it has been shown above that neither Nishigaki nor Oku can be relied upon to teach or suggest this feature.

For at least the reasons stated above, claims 2, 4, 5, 8, 10, 11, 14, 16 and 17 are distinguishable over the combination of Nishigaki and Oku. Applicant respectfully requests that the rejection of claims based on Nishigaki and Oku be withdrawn.

§ 103 REJECTION – NISHIGAKI, OKU, KIMURA

Claims 6, 12 and 18 stand rejected under 35 USC 103(a) as allegedly being unpatentable over Nishigaki in view of Oku and in view of Kimura. *See Office Action, items 19-22.* Applicant respectfully traverses. It is noted that the rejected claims depend from independent claims 5, 11, and 17. It has been shown above that claim 5, 11 and 17 are distinguishable over the combination of Nishigaki and Oku. Kimura has not been, and indeed cannot be, relied upon to correct for at least the above-noted deficiencies of Nishigaki and Oku. Therefore, claims 5, 11 and 17 are distinguishable over Nishigaki, Oku and Kimura.

For at least due to the dependency thereon, claims 6, 12 and 18 are also distinguishable over the combination of Nishigaki, Oku and Kimura. Applicant respectfully requests that the rejection of claims based on Nishigaki, Oku, and Kimura be withdrawn.

CONCLUSION

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact Hyung Sohn (Reg.

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000